#### (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

# (19) World Intellectual Property Organization

International Bureau



# 

### (43) International Publication Date 7 July 2005 (07.07.2005)

## PCT

# (10) International Publication Number WO 2005/062646 A1

(51) International Patent Classification7:

H04Q 7/34

(21) International Application Number:

PCT/KR2004/002437

(22) International Filing Date:

22 September 2004 (22.09.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 10-2003-0095255

> 23 December 2003 (23.12.2003) KR

10-2004-0015784 9 March 2004 (09.03.2004)

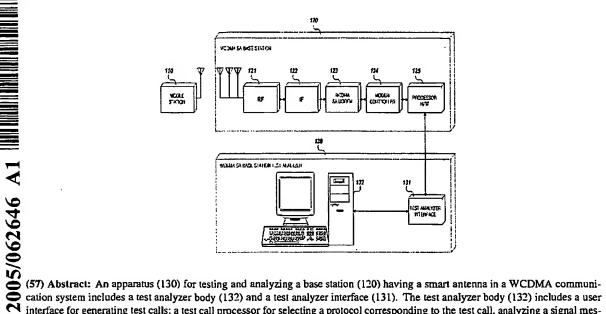
- (71) Applicant (for all designated States except US): Electronics and Telecommunications Research Institute [KR/KR]; 161, Gajeong-dong, Yuseong-gu, Daejeon 305-350 (KR).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): SHIN, Sung-Moon [KR/KR]; Hanvit Apt. 101-1104, Eoeun-dong,

Yuseong-gu, Daejeon-city 305-755 (KR). BANG, Seung-Chan [KR/KR]; Nuri Apt. 115-1502, Wolpyeong -dong, Seo-gu, Daejeon-city 302-791 (KR).

- (74) Agent: YOU ME PATENT AND LAW FIRM; Seolim Bldg., 649-10, Yoksam-dong, Kangnam-ku, Seoul 135-080 (KR).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: APPARATUS AND METHOD FOR TESTING AND ANALYZING BASE STATION WITH SMART ANTENNA, AND PROTOCOL STRUCTURE



interface for generating test calls; a test call processor for selecting a protocol corresponding to the test call, analyzing a signal message for the protocol to monitor a call setup procedure, processing the test call to analyze traffic, and monitoring the traffic quality according to the selected protocol; a data processor for analyzing and processing the performance data of the test call processor; and a network interface for transmitting and receiving the protocol signal message, traffic, and performance message.

#### 

#### Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.